

Abstract

Title: The technique of throwing disciplines in the heptathlon of 14 to 16 years female athletes

Objectives:

The aim of the research is to observe changes in locomotory tasks – discovering changes in the technique of shot put and javelin throw and revealing changes of performance in both disciplines of young heptathletes within four months (March-June 2010).

Methods:

The research consists of a detailed video image analysis of the locomotory tasks within an interval of four months. Comparing the technique of shot put and javelin throw and also concerning the preparatory training, the training was intended to help to improve technical expression and performance. The girls were measured and pre-controlled in tests in running (50m of the high start-up item), jumping (long jump from the place) and throwing (medicine ball over the head weighting 1kg and 2 kg). Furthermore, height and weight of the observed girls were recorded, too.

Data were collected by non-standard methods of valuation and comparison.

Results:

I found out that training exercises are necessary for practising the technique and that they have indeed a relevant influence on the performance. From the technical viewpoint there have been reported positive changes, but the increase of performance was not as I expected. The research shows that the greatest progresses are achieved by those girls who showed the best performance in the cross-up tests, which means that they were better prepared. Furthermore, it turns out that the performance growth in this age is affected by the fitness disposition, by the level of locomotory expression and it is deeply related to the individual physical growth.

Keywords:

Shot put, javelin throw, engineering, testing, heptathlon, performance.